

IN THE CLAIMS:

Please amend Claims 1, 2, 4, 6 and 11, and add new Claims 12 and 13 as shown below. The claims, as pending in the subject application, read as follows:

1. (Currently Amended) An electric potential measuring device comprising:

a signal detection electrode;

a movable structure comprised of a first solid material portion comprised of a dielectric and a second solid material portion comprised of a conductive material; and

a drive mechanism for moving the movable structure in such a way as to change a positional relationship of the first and second solid material portions for the signal detection electrode,

~~wherein the first solid material portion is comprised of a dielectric, the second solid material portion is comprised of a conductive material, the movable structure~~
has no aperture and a charge induced on the signal detection electrode is modulated by moving the movable structure, to measure an electric potential of the object to be measured.

2. (Currently Amended) The electric potential measuring device according to claim 1, wherein said detection electrode is formed on a substrate disposed in opposition to the object to be measured, and said movable structure is periodically movable in a surface parallel to the substrate just above the surface of the object to be measured side of the signal detection electrode.

3. (Original) The electric potential measuring device according to claim 1, wherein said second solid material portion is periodically shaped in a predetermined direction, and an insulator layer is formed on said detection electrode, and an electric conductor layer of a shape having the same direction and the same periodic length as the second solid material portion is formed on the insulator layer.

4. (Currently Amended) The electric potential measuring device according to claim 1, wherein said second solid material portion is periodically shaped in a predetermined direction, and an electric conductor layer of a shape having the same direction and the same periodic length as the second solid material portion is formed on said detection electrode through an insulator layer, and no insulator layer exists in a part in which the electric conductor layer is not formed but the signal detection electrode is exposed.

5. (Original) The electric potential measuring device according to claim 1, wherein said second solid material portion is periodically shaped in a predetermined direction, and said detection electrode is formed in a shape having the same direction and the same periodic length as the second solid material portion.

6. (Currently Amended) The electric potential measuring device according to claim 5, wherein the electric conductor layer of a shape having the same direction and the same periodic length as the second solid material portion is formed on a portion in which the signal detection electrode is not formed through an insulator layer.

7. (Original) The electric potential measuring device according to claim 6, wherein the shape of said detection electrode has a divided structure, and is constituted such that a signal generated by each of the divided detection electrode can be independently measured and processed.

8. (Original) The electric potential measuring device according to claim 1, wherein said second solid material portion is comprised of said conductive material, and the conductive material is grounded.

9. (Original) The electric potential measuring device according to claim 1, wherein said movable structure is a sheet-shaped structure.

10. (Original) An image forming apparatus, comprising the electric potential measuring device according to claim 1 and an image forming means for performing a control of an image formation by using the electric potential measuring device.

11. (Currently Amended) An electric potential measuring method comprising the steps of:

preparing between an object to be measured and a signal [[a]] detection electrode ~~comprised of a conductive material and disposed in opposition to an object to be measured;~~ a movable structure comprised of a first solid material portion comprised of a dielectric and a second solid material portion comprised of a conductive material ~~having a~~

~~relative dielectric constant different from the dielectric or a conductive material and disposed so as to come to the object to be measured side of the detection electrode; and~~

moving the movable structure in such a way as to change a positional relationship of the first and second solid material portions for the signal detection electrode in an area between the detection electrode and the object to be measured, whereby wherein a charge induced on the signal detection electrode by electric lines of force emanating from the object to be measured is modulated, to measure an electric potential of the object to be measured.

12. (New) An electric potential measuring device comprising:

a signal detection electrode;)

a movable structure comprised of a first solid material portion which transmits electric lines of force and a second solid material portion which shields from electric lines of force; and

a drive mechanism for moving the movable structure in such a way as to change a positional relationship of the first and second solid material portions for the signal detection electrode,

wherein the movable structure has no aperture and a charge induced on the signal detection electrode is modulated by moving the movable structure, to measure an electric potential of an object to be measured.

13. (New) An electric potential measure method comprising the steps of:

preparing between an object to be measured and a signal detection electrode
a movable structure comprised of a first solid material portion which transmits electric
lines of force and a second solid material portion which shields from electric lines of force;
and

moving the movable structure in such a way as to change a positional
relationship of the first and second solid material portions for the signal detection
electrode, wherein a charge induced on the signal detection electrode by electric lines of
force emanating from the object to be measured is modulated, to measure an electric
potential of the object to be measured.